(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 10 November 2005 (10.11.2005)

PCT

(10) International Publication Number WO 2005/106112 A1

(51) International Patent Classification7:

D21C 1/02

(21) International Application Number:

PCT/FI2005/050138

(22) International Filing Date: 28 April 2005 (28.04.2005)

(25) Filing Language:

(26) Publication Language:

English

(30) Priority Data: 20040637

5 May 2004 (05.05.2004)

- (71) Applicant (for all designated States except US): METSO PAPER, INC. [FI/FI]; Fabianinkatu 9 A, FI-00130 Helsinki (FI).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SVEDMAN. Mikael [FI/FI]; Strandgatan 10 C 13, FI-65100 Vasa (FI). JONKKA, Arvo [FI/FI]; Mäntykatu 20, FI-28430 Pori (FI). UUSITALO, Päivi [FI/FI]; Hepokuja 6, FI-29600 Noormarkku (FI). TÄHKÄNEN, Hannu [FI/FI]; Syväraumankatu 10 B 20, FI-26100 Rauma (FI). LAMPINEN, Rami [FI/FI]; Ilmarinkatu 35 A 2, FI-33500 Tampere (FI).

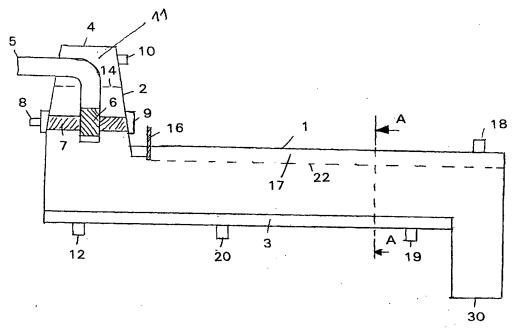
- OY JALO ANT-WUORINEN AB; Iso (74) Agent: Roobertinkatu 4-6 A, FI-00120 HELSINKI (FI).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR REMOVING GAS FROM PARTICULATED MATERIAL



(57) Abstract: The present invention concerns a method and an apparatus for removing gas from comminuted lignocellulose material, wherein material is heated with steam into a degasification temperature and the heated material flow is led as a dense composed bed through a gas removal stage. The material is heated by introducing a steam flow into the material flow in transversal direction with respect to the direction of the material flow.

WO 2005/106112 A1



 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.